

# BNSF

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William Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street, N. W.  
Washington, D. C. 20554

November 15, 1995

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Dear Mr. Caton,

The Commission's Refarming *Report and Order* (PR Docket No. 92-235) includes a proposal for the consolidation of radio services. Following are our comments with regard to that consolidation.

The Commission's plan to consolidate radio services will seriously impact our ability to safely and efficiently run our business. The consolidation of the Railroad Radio Service with other Services will create a common pool of radio channels assigned by coordinators unfamiliar with the safety implications of railroad radio use. This situation will negatively impact our ability to maintain a safe work place for our employees and the public. The Burlington Northern Santa Fe railroad requests that the Railroad Radio Service be exempt from the consolidation.

The negative impacts of the consolidation of Railroad Radios Service with other radio Services can be classified into two broad categories, *operational safety* and *operational complications*.

The effects upon *operational safety* would be numerous. Railroads rely on a centralized safety management system, using VHF radios, to provide uniformity and simplicity in operations. Consolidation will significantly complicate spectrum management, compromising safety in the process, by allowing a variety of users and systems to interact in close proximity. If railroads are forced to share their channels with non-railroad users, railroad channels will migrate toward the same poor quality characteristics currently observed in many VHF radio operations. Railroads will not be guaranteed the constant access to clear channels necessary for urgent and/or emergency transmissions.

Because of the long lengths of most trains, the ability of on-board crews to personally observe the entire train is limited. Immediate and unobstructed communications with other railroad employees either in the vicinity of the train or in a command center is crucial. In the event of an emergency situation involving their train, the on-board crew must be guaranteed clear and timely notification.

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Consolidation would require railroads to compete for channels in other bands to manage growth. This means railroad radios will have to be capable of tuning over a much larger range of channels. This type of radio will be more complex and confusing to operate and could easily lead to accidents. A radio that is easy to use saves lives, one that is not courts disaster.

The railroad has several unique safety enhancements that include end-of-train devices, defect detectors, wayside control equipment and slave locomotives. These applications will be compromised in a shared environment because of the increased potential for interference. Interference to frequencies supporting these applications could impede rail traffic and increase the risk of injury to railroad employees and the public.

The radio systems used by the Railroad Industry support a safety environment very similar to the FAA managed system used by the Airlines. The railroad environment may be more critical however, due to the more limited recovery options a railroad track offers. The FAA system is dedicated to maintaining safe air traffic operations and has been protected. The rail system has similar protection with a dedicated service but, that will be compromised with the consolidation of channel coordination. The requirements for protection from interference are vital to insuring safe operations in both environments and should be maintained.

Several *operation complications* will also arise as a result of consolidation. The railroads now share an exclusive band of channels which allows nationwide interoperability. The availability of these channels to non-railroad users will complicate the coordination for continuous single use that is now afforded to and is part of all railroad radio operations. In addition, by allowing non-railroad users access to railroad channels, consolidation will make it impossible to accomplish a transition to narrowband technology that allows nationwide interoperability. This results from the fact that the transition to narrowband will be a complex phased process which will take some time to accomplish. If a non-railroad user obtains a frequency that would otherwise be needed to ensure a uniform transition for the railroads prior to the railroad's conversion, then interoperability cannot be preserved.

The shared channel pool environment will make it difficult to determine what type of future radio equipment to purchase. In addition to the increased expenses and complexity of strategic planning, safety will be compromised and the implementation of new and innovative technologies will be delayed.

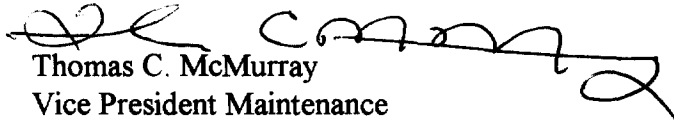
Coordination will complicate international frequency coordination with Canada, making it impossible to maintain cross-border interoperability and increasing the risk of interference to Canadian railroad radio operations. For U.S. and Canadian railroad companies that operate in both countries, as BNSF does, consolidation could mean that it would be necessary to have two sets of radio equipment; one set to operate in Canada and one set to operate in the United States.

Although we applaud the Commission's efforts to improve the management and use of radio spectrum, we cannot compromise safety in the interest of spectral efficiency. Retaining the Railroad Radio Service would allow us to maintain the safe operating environment vital to our employees and the communities we serve. Retaining the Service will also allow us to transition to

the narrower channels mandated by the Refarming Report and Order with the highest degree of safety.

Thank you for your consideration in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tom McMurray', with a stylized flourish at the end.

Thomas C. McMurray  
Vice President Maintenance  
Burlington Northern Santa Fe Corporation